NATURAL SCIENCES OF PHILADELPHIA.

DECEMBER 6.

Mr. TRYON in the chair.

Twenty-three members present.

The death of Mr. Jas. H. Orne was announced. The death of Sir Roderick J. Murchison, a correspondent of the Academy, was also announced.

The following paper was presented for publication :---

"Descriptions of new Western Palæozoic Fossils, mainly from the Cincinnati Groups of the Lower Silurian Series of Ohio." By F. B. Meek.

Prof. COPE made some remarks on a peculiar habit recently observed by Alfred R. Wallace, in the *Phrynosomas*, in the Zoological Gardens in London. These animals eject from their eyes, in self-defence, a red fluid like blood. On inquiry of Dr. Edw. Palmer, of the Smithsonian Institution, who had spent some years in Arizona, whether he had observed such a habit in any of the species, he handed me the following extract from the "Arizona Miner" of August 20th, 1869:—

"Dr. Palmer and party got back here Wednesday evening last, from Bill Williams' Mountain, E. J. Cook, one of the Prescott party that accompanied the expedition, informs us that a [horned] toad was found on the top of the mountain, which, when made mad, spurted blood from its eyes. It was secured by the doctor. The Prescott party did not find game as plenty as they had expected, yet they succeeded in killing one bear, eight or ten turkeys, and a deer. They say the country is the most beautiful ever seen by them. The valleys are many and large; pine, oak, and other timber covers the entire region, and the grass was waist-high. The region of country visited by them lies about 60 miles north of this place, on the line of the 35th parallel railroad route."

This specimen is in the doctor's collection, now in my hands, and belongs to the species *Phrynosoma ornatissima*, Gird.

DECEMBER 12.

The President, Dr. RUSCHENBERGER, in the chair.

Thirty-five members present.

Notice of some Worms.—Prof. LEIDY remarked that Prof. Hayden reports the brook trout, Salmo fontinalis, of the headwaters 1872.] of the Yellowstone River, to be much infested with a species of tapeworm. A number of specimens of the worm, collected by C. Carrington, have been submitted to his examination, but, unfortunately, most of them are so far decomposed as nearly to be reduced to the condition of pulp. The worms are stated to have been taken from the abdominal cavity, but not from the intestinal canal, and often were found beneath the skin, extended among the muscles or inclosed in oval sacs. Several cysts preserved entire contained worms in a better condition for examination than the others, and from these the characters of the parasite have been ascertained. It belongs to the old genus *Bothriocephalus*, and to that section now named *Dibothrium*. Two species of this genus have long been known as infecting the salmon and other members of the same genus of fishes in Europe, but the parasite of the Yellowstone trout appears to be a different one.

Two of the best preserved specimens measured five inches long by a line wide at the broadest part. The head, about a fourth of a line in diameter, is obcordate. The two suckers or bothria are thick and discoidal, placed back to back, obcordate in outline, and directed with their broad and slightly depressed surface towards the margins of the body. The body is flat, thick, with rounded margins, and is narrowly annulated or segmented. The annulations due to muscular bands measure about ten to the line. Segments, independent of the annulations if existing, could not be distinguished, perhaps on account of the badly-preserved condition of the specimens. No genital apertures are visible at the sides nor at the margins. No internal organs are visible, but the soft solid interior tissue is filled with round corpuseles resembling starch granules. These are, however, composed of carbonate of lime, as they are dissolved by acetic acid with an abundant evolution of carbonic acid.

From the form of the head, the worm was named DIBOTHRIUM CORDICEPS.

Numerous leeches collected by Prof. Hayden's assistants, Messrs. Carrington and Dawes, in a lake in Wyoming Territory, appear to belong to the species Aulastomum lacustris, first discovered several years ago in Twin Lake, Minnesota.⁴ Mr. Carrington informs us that the head of a horse, which was thrown into the lake, in a few hours appeared black from the quantity of these leeches which adhered to it. It is barely probable that this leech is the one described by Thomas Say, in Long's Expeditions, under the name of *Hirudo marmorata*, though the characters do not accord with his description of the latter. It is not improbable that the two are quite distinct. *H. marmorata*, together with another species, *H. lateralis*, was obtained from small lakes on the high land between Lake Superior and Rainy

¹ Proc. Acad. Nat. Sci., 1868, p. 229.

[February 13,

Lake. Neither of these appears to have been obtained since their first discovery.

Several large hair worms from Fish Creek, Montana, pertain to the species *Gordius lacutris*, previously described from specimens obtained in Kansas. It is the largest known *Gordius*. The females of the Kansas specimens ranged from 10 inches to $2\frac{1}{2}$ feet in length; the males, from 8 inches to upwards of 2 feet. The females of the Montana specimens measure from $1\frac{1}{4}$ to $2\frac{1}{4}$ feet in length; a male, $8\frac{1}{2}$ inches in length. The females are pale brown; the males dark brown, and with a strongly-forked tail.

DECEMBER 19.

The President, Dr. RUSCHENBERGER, in the chair.

Twenty-one members present.

DECEMBER 26.

The President, Dr. RUSCHENBERGER, in the chair.

Twenty-five members present.

On favorable report of the committee, the following paper was ordered to be printed:---

¹ Proc. Acad. Nat. Sci., 1851, p. 275; 1857, p. 204. Amer. Entomol., vol. ii., p. 194.

1872.]